

## REMARKS

Applicant's representative appreciates the withdrawal of the finality of the Office Action mailed on June 17, 2004.

Claim 58 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,483,580 to Xu et al. ("Xu"). The rejection is respectfully traversed.

Claim 58 is directed to the measurements of one or more parameters of a three-dimensional diffracting structure. Thus the apparatus of Claim 58 comprises a system carrying out a measurement of the three-dimensional diffracting structure to obtain the measured intensities or changes in polarization states of a diffraction from the structure; a data source that supplies a library of sets of intensity or change in polarization state data of the diffraction at wave lengths and a processor comparing the measured intensities or changes in polarization state to the library to find a value related to one or more parameters of the three-dimensional diffracting structure. An embodiment of the invention of Claim 58 is explained in the specification from page 17, line 18 through page 19, line 16 and Figures 9 and 10. As explained in such section of the specification, the measurement of three-dimensional diffracting structures is much more complicated in comparison to the measurement of two-dimensional diffracting structures. Xu simply contains no disclosure at all pertaining to the measurement of three-dimensional structures such as three-dimensional gratings as illustrated by the embodiment on pages 17-19 and Figures 9 and 10 of the present application. If the Examiner disagrees, it is respectfully requested that the Examiner explain in detail where the measurement of three-dimensional diffracting structures can be found in Xu.

It is believed to be well settled that in order for a reference to anticipate a claim, there must be identity of elements between those of the reference and those of the claim. Xu clearly fails this test. Since Xu fails to teach or suggest the above-described features of Claim 58, there is clearly no identity of elements between Xu and those of Claim 58. Furthermore, in view of the vast differences between the measurement of two-dimensional diffracting gratings as taught by Xu and the measurement of three-dimensional diffracting structures as claimed in Claim 58, it is believed that there is no reason or motivation for one skilled in the art to modify the two-dimensional grating measurement technique for the measurement of three-dimensional structures. Claim 58 is therefore believed to be allowable.

We appreciate the Examiner's indication that Claims 1-30, 36-57, 62-83, 87-108 and 112-139 are allowable over the prior art of record. We however disagree with the Examiner's statement of reasons for the indication of allowable subject matter. Thus Claims 21, 52, 78, 103, 112, 116, 118 and 127 contain none of the limitations listed in the Statement of Reasons by the Examiner on page 3 of the Office Action. Many of the claims dependent upon these claims likewise do not contain any of the listed limitations.

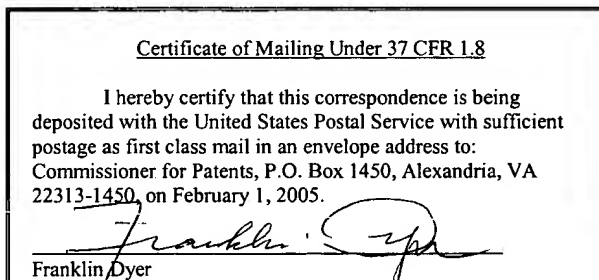
In addition, the limitation of "performing an optimized estimation within a neighborhood of the set of change in polarization state data using said measured changes in polarization state to arrive at a second set of values of the one or more parameters" does not appear in Claims 9, 27, 42, 56, 68, 82, 93 and 107. The limitation of "choosing a first set of values of the one or more parameters as a function of sensitivity of the change in polarization" does not appear in any of the independent claims and most of the dependent claims of the present application. The limitation of "storing the eigenevalues

and using the stored eigenevalues for obtaining the value of one or more parameters of the diffracting structure” does not appear in claims 1, 27, 36, 56, 62, 82, 87 and 107 and most of the dependent claims of the present application.

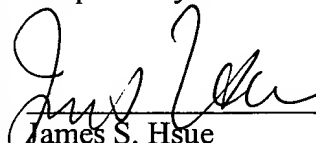
The limitation of “wavelengths of the intensity or change in polarization state data in the one or more sets are chosen to reduce the influence of the properties of the one or more layers” does not appear in any of the independent claims and most of the dependent claims of the present application.

The limitation “density of the intensity or change in polarization state data provided at the wavelengths in the one or more sets is chosen as a function of sensitivity of the intensity or change in polarization state data to changes in wavelengths” does not appear in Claims 1, 9, 36, 42, 62, 68, 87 and 93 as well as many or most of the dependent claims.

Claims 1-30, 36-58, 62-83, 87-108 and 112-139 are presently pending in the application. Reconsideration of the rejection is respectfully requested and an early indication of the allowability of all the claims is earnestly solicited.



Respectfully submitted,

  
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Date